## MOSQUITO NOTES.

BY C. S. LUDLOW, M. SC.,

Laboratory of the Office of the Surgeon-General U.S. Army, Washington.

From one of the smaller of the Philippine Islands comes a new *Megarhinus*, which is noticeable for its dark caudal tuft and banded tarsi, and with it a specimen of *Stegomyia fasciata*, Fabr., accurately marked in all points except the hind tarsi, which lack all the white bands except those on the metatarsi, while from Jolo is sent a new variety of *Desvoidea*.

The *Megarhinus*, and an apparently new *Grabhamia* from California, are described, and the differences for the *Desvoidea* are given below:

Megarhinus Le Waldii, n. sp.—Male.—Head dark brown, covered with flat iridescent scales, probably brown, but appear blue and green, with a light bluish, almost white, rim around the eyes, a few brown bristles projecting forward; antennæ dark brown, almost black; plumes heavy and very dark, the basal joint densely covered with fine white hair-like tomentum, the first joint long and densely scaled, the iridescence showing as purple and white; proboscis dark; palpi dark, a few light scales (or showing light iridescence) on the first joint, the last joint twice as long as the penultimate, and pointed; clypeus brown, covered with fine white tomentum; eyes blue.

Thorax dark brown, densely covered with scales (probably brown) which show "peacock blues and greens" all over the dorsum, a little lighter to almost bluish white laterally, a few bristles at the wing joint; scutellum like mesothorax, lateral lobes apparently lighter, and a few brown bristles on each lobe; prothoracic lobes heavily scaled like mesothorax; pleura dark brown, very densely covered with white scales; metanotum dark brown.

Abdomen dark, heavily scaled, showing blue-green iridescence. First segment has a brown median spot, light blue submedian and white lateral spots. Apical hairs on most of the segments very short or lacking; the sides, however, are densely white-haired, and these white hairs connect with the caudal tuft, so that the cephalic part of this has some white in it, the main body of it being dark brown, almost black. There are also suggestions of small white lateral spots on some of the segments. Venter dark.

Legs: coxæ and trochanters all heavily white scaled. Hind femora dark blue dorsally, ventrally white, especially at the base; tibiæ dark blue; metatarsi dark; first tarsal joint basally white-banded, otherwise the tarsi are dark, sometimes a brilliant purple; ungues simple, equal, and rather straight. Mid legs all dark except a light band at the base of metatarsal and first tarsal joints. These bands are conspicuous in some lights and hardly suggested in others. Fore legs dark, Ungues on fore and mid legs large, unequal, and the larger one uniserrate. The legs show, as a whole, blue on femora and tibiæ, while the tarsal joints are brown or purple, the metatarsi between the two.

Wings clear and sparsely scaled; scales on the costa showing the blue iridescence strongly. Fork cells short. First submarginal cell about one-half the length and one-half the width of the second posterior, the stems very long, in the former nearly three times the length of the cell. Supernumerary cross-vein nearly the length of the mid and more than four times its length exterior to it; the posterior cross-vein nearly twice as long as the mid, which it meets. The fork of the fifth long vein is very far interior. Halteres light. The median scales are usually broad at the apical end, and remind one of the "inflated" scales on the body.

Length: 11 mm. Habitat: Salog, Guimaras Island, P. I. Taken April 10th.

Described from one very perfect specimen raised by Dr. L. T. Le Wald, 1st Lt. Assistant Surgeon, U. S. Army, in the laboratory (Base Hospital) at Iloilo, Panay, from larvæ brought from Salog on April 1st. No data as to length of larval and pupal stages were sent. A dried larva accompanied the adult, but as it is much shrivelled no description is undertaken.

Grabhamia de Niedmannii, n. sp.—Female.—Head dark brown, covered with ochraceous curved scales, ochraceous forked scales on the occiput, flat ochraceous, with a few brown scales on the sides, a line of light scales around the eyes, and a few light hairs projecting forward between the eyes; antennæ brown, verticles brown, pubescence light, basal cell sparsely white-scaled, first joint heavily white-scaled on the inner side; proboscis mostly light-scaled, a few scattered brown scales, and the very base and tip dark; palpi dark, with white tips and a white band about two-thirds the way down, probably at the apex of the second joint, a few white scales at the base; eyes brown; clypeus brown.

Thorax dark brown, the median portion (about one-third the width of the mesothorax) heavily covered with golden-brown slender curved scales; just exterior to this on either side is a very narrow white line extending to the scutellum. There are also two submedian very narrow white lines extending the whole length of the mesothorax and curving around the "bare spot." Laterad the mesothorax is densely covered with broader ochraceous scales, becoming white just over the wing joint, and directly dorsad of this white spot is a large dark brown spot, suggesting an "eye spot"; pleura dark brown, heavily scaled with broad curved light ochraceous to white scales; scutellum dark brown, with ochraceous slender curved scales and numerous brown bristles; metanotum dark brown.

Abdomen dark scaled, with a few light scales scattered irregularly through the brown, and a heavy basal white spot very much deepened on the median line, so that it curves down in the middle, and on some of the segments covers nearly one-half the segment. There are also heavy basal lateral spots, but not always continuous with the dorsal spot, which in most instances hardly creates a band. The last few segments are much less heavily marked, but may have very narrow apical light bands, which, however, do not usually extend all the way across; light apical hairs on all segments. Venter mostly light scaled.

Legs: coxæ and trochanters all mostly light scaled. Femora all ventrally light, but speckled, dark and light scales nearly equally mixed on the dorsal side, the brown scales preponderating towards the apex, so that the femora are quite dark near the distal end, but the apex itself has a ring of white scales, which, with a few at the base of the tibiæ, make distinct knee spots; tibiæ somewhat darker than the femora, the dark scales in excess, and growing more so towards the apex; metatarsi dark, like tibiæ, and all basally light-banded, but in the fore legs the bands are not very distinct. All the tarsal joints basally light-banded, the bands on mid and fore legs narrow, sometimes minute, and that on the last joint of the fore legs sometimes missing; on the hind legs the bands are much broader and conspicuous. All the ungues large, equal and uniserrate.

Wings rather heavily covered with dark and light scales, both median and lateral scales very heavy and spatulate on most of the veins, but those on the under side of the wing are narrow. First submarginal cell longer and narrower than the second posterior, bases nearly on a line; the stem of the first submarginal about one-third the length of the cell. Supernumerary cross-vein a little longer than the mid, which it meets at a marked angle; posterior cross-vein also a little longer than mid and nearly twice its length distant. Halteres light with dark knobs.

Length: 7 mm. Habitat: Benicia, Cal. Taken March, April and May.

While this species lies near vittata, Theobald, and dorsalis, Meig., it differs from the first in abdominal markings, in white scales on the two veins, etc., and from the latter also in abdominal markings and in the tarsal banding, which in this species does not include both sides of the joints.

The specimens were sent in a series of collections by Dr. William F. de Niedmann, Post Surgeon, Benicia Barracks, Cal.

Desvoidea fusca, Theob., var. Joloensis, new var.

The *Desvoidea fusca* sent from Jolo differ from the type in two small points, but as this difference appears in every specimen of a collection of 23 (males and females) it seems advisable to note it.

On the mesothorax is a short median line of white, beginning at the scutellum, tapering as it runs cephalad, and ending just cephalad of a line drawn perpendicular to the wing joint. The middle lobe of the scutellum is also white.

Taken at Jolo, Jolo, P. I., probably in May, 1903, as it reached San Francisco in August, 1903, but no date nor name of collector accompanied it. By some accident the collection was not forwarded, so was not included in the list published last year.\*

Culex teniorhyneus, Wied, has lately been sent in from Fort Caswell, N. C. So far as I know it has not hitherto been reported north of Florida.

<sup>\*</sup>Journ. N. Y. Ent. Soc., Sept., 1903.